IV. Some Remarks on the Natural History of the Black Stork, for the first time captured in Great Britain. By George Montagu, Esq. F.L.S.

Read May 2, 1815.

## ARDEA NIGRA. Linn.

BLACK STORK.

Most ornithological writers mention this bird as an European species, less common than the White Stork, and of a more solitary disposition. Its latitudinal range in its periodical migrations is apparently greater than that of the white species, since it is said to visit Russia and Siberia, and also to pass over Sweden in the spring in vast flocks, flying towards the extreme north, and soaring to so great a height as to appear no larger than a sparrow.

From innumerable observations it is evident that migrative birds are much more confined in their longitudinal range than in their latitudinal: hence it is that many species pass through France and Germany in the spring, and return in the autumn, which by no chance have as yet been ever observed to wander into this country, although they proceed much further north than any part of Britain. Others, from accidental causes of which we have no certain knowledge, occasionally vary a little from their natural course, and are found solitary in this country. Of this I have the pleasure of announcing an example in Ardea nigra, the only instance I believe of its being found at large in Great Britain.

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This bird was captured by means of a slight shot-wound in the wing, without breaking a bone, and is now in my possession in excellent health. To my scientific friend, Mr. Austin of Bridgewater, naturalists in general, and myself in particular, are indebted for this addition to the British Fauna, he having rescued it from plebeian hands, where in all probability the circumstance would have been consigned to oblivion. It was shot in West Sedgemoor, adjoining the parish of Stoke St. Gregory, Somersetshire, on the 13th of May 1814; and what is remarkable, another very rare bird, the White Spoonbill, was shot on the same moor, by the same person, in November of the preceding year.

When first the Black Stork was observed, it was searching for food by the side of a drain, and when approached flew a considerable distance; but in a second attempt the fowler got sufficiently near to slightly wound it. It made little resistance, and on the following day ate some eels that had been placed near it.

I was greatly rejoiced to receive this interesting bird alive from Mr. Austin, as its manners do not seem to be much known. Like the White Stork, it frequently rests upon one leg; and if alarmed, particularly by the approach of a dog, it makes a considerable noise by reiterated snapping of the bill, similar to that species. It soon became docile, and would follow its feeder for a favourite morsel, an eel. When very hungry it crouches, resting the whole length of the legs upon the ground, and supplicantly seems to demand food, by nodding the head, flapping its unwieldy pinions, and forcibly blowing the air from the lungs with audible exspirations. Whenever it is approached, the expulsion of air accompanied by repeated nodding of the head is provoked. The bird is of a mild and peaceful disposition, very unlike many of its congeners; for it never makes use of its formidable bill offensively against any of the companions of its prison, and even submits peaceably

peaceably to be taken up without much struggle. From the manner in which it is observed to scarch the grass with its bill, there can be no doubt that reptiles form part of its natural food; even mice, worms, and the larger insects, probably add to its usual repast. When scarching in thick grass or in the mud for its prey, the bill is kept partly open: by this means I have observed it take cels in a pond with great dexterity: no spear, common in use for taking that fish, can more effectually receive it between its prongs than the grasp of the Stork's open mandibles. A small cel has no chance of escaping when once roused from its lurking-place. But the Stork does not gorge its prey instantly like the Corvorant; on the contrary, it retires to the margin of the pool, and there disables its prey by shaking and beating with its bill, before it ventures to swallow it. I never observed this bird attempt to swim; but it will wade up to the belly, and occasionally thrust the whole head and neck under water after its prev. It prefers an elevated spot on which to repose: an old ivy-bound weeping-willow, that lies prostrate over the pond, is usually resorted to for that purpose. In this quiescent state the neck is much shortened by resting the hinder part of the head on the back; and the bill rests on the fore-part of the neck, over which the feathers flow partly so as to conceal it, making a very singular appearance.

The Black Stork, perhaps, is not more delicate in its food than the white species: fish appears to be preferred to flesh, but when very hungry any sort of offal is acceptable.

All birds that pursue their migrative course by night in congregation, have undoubtedly some cry by which the whole assembly is kept together; yet it should appear that at other times the Black Stork is extremely mute: not a single note has been heard to issue from the bird in question since its captivity.

As there is a little variation in the plumage of my specimen of Ardea nigra from what has generally been described, and as the plumage when first captured indicated immaturity, being very different from what has been since assumed, I beg leave to sub-

join a short description of three states of plumage.

The head and upper part of the neck speckled with pale brown of different shades, having a slight tinge of rufous, becoming darker on the lower part of the neck, the feathers being dusky in the middle: the back, seapulars, and coverts of the wings duskyblack, slightly margined with brown: quills and tail dusky-black, the latter glossed with green: the feathers on the lower part of the neck before pretty long and loose, hanging over the breast: from thence to the tail dingy-white. On the back were two or three feathers, apparently new, that were of a dark glossy green, indicating a change of plumage. This description was taken in June 1814, soon after the bird was captured. The bird continued very gradually to moult throughout the summer and winter, becoming much darker on the head and neck, and much greener on the back; and by the beginning of February 1815 the upper part of the head and back of the neck became duskyblack, glossed with green; the lower neck before dusky-black, and the whole upper part of the body, including wing-coverts and scapulars, dark shining green, similar in colour to that variety of the Glossy Ibis known under the title of Tantalus viridis\*. The under parts of the plumage continued as at first. The bill, which is full seven inches in length, has the upper mandible a trifle the longest, and deflects a little at the point: the colour is dusky-red. brighter at the base, and orange at the tip +: irides light hazel: the lore and orbits bare of feathers, and of a dull red; the legs

<sup>\*</sup> Pennant says blue. Arct. Zool,

<sup>†</sup> Latham says greenish-grey, with a whitish tip.

and toes dull orange. These parts have changed but little, and perhaps are rather brighter in colour than at first.

Indisposition having prevented my seeing the bird since the last-mentioned period till the middle of March, I was much surprised to find the appearance of a few feathers on the upper part of the back, that were dusky, resplendent with violet and purple, having a margin of dark glossy green. These elegant feathers continued to increase in number, till the whole upper part of the back had nearly assumed this beautiful plumage by the first of April. At this time no other part of the bird indicated any further change of plumage: the scapulars and coverts, many of which had recently changed, continued of the same colour as last described, without the purple reflections or marginal green. It is scarcely possible to account for such a succession of change in plumage in so short a time, except by supposing that a change in the constitution of the bird, produced by captivity and a want of natural food, had caused obstruction to the usual course of moulting, and that the autumnal change had been retarded, and was scarcely effected before the spring moulting commenced. The bill at this season has also become more orange.